

APPENDIX A

Pending Claims

1. (Original) A laryngeal mask construction for concurrent airway service to a patient's laryngeal inlet and for removal of gastric-discharge products from the oesophagus, said construction comprising:

an inflatable ring in the form of a generally elliptical annulus having an outer periphery configured for continuously sealed adaptation to the laryngeal inlet, said ring extending longitudinally between proximal and distal ends and having an inflation port connection at its proximal end, said ring being a moulded product of relatively thin and softly pliant elastomeric material, said ring including within the inner periphery of said annulus an apertured panel or membrane establishing separation between a pharyngeal-chamber side and a laryngeal-chamber side, said ring further integrally including at its distal end a distally open tubular conduit for operative engagement and communication with the oesophageal inlet, said tubular conduit extending from its distally open end and in the proximal direction adjacent said panel and on the pharyngeal side of said panel;

a domed backing-plate member of relatively stiff elastomeric material and having a concave side which terminates in a generally elliptical footing in a geometric plane and in sealed engagement with said panel at the inner periphery of said annulus, said backing-plate member having an airway-tube connecting formation on a proximally directional axis that is at an acute angle with said geometric plane, said backing-plate member providing stability to the inner periphery of said annulus and directional stability for said tubular conduit;

an airway tube connected to said connecting formation; and

a gastric-discharge tube connected to said tubular conduit.

2. (Original) The mask construction of claim 1, in which said airway tube and said gastric-discharge tube are bonded to each other in side-by-side relation.

3. (Original) The mask construction of claim 1, in which said tubular conduit extends proximally to approximately 50 percent of the longitudinal extent of said inflatable ring.

4. (Original) The mask construction of claim 1, in which said tubular conduit extends proximally to at least 50 percent of the longitudinal extent of said inflatable ring.
5. (Original) The mask construction of claim 1, in which said backing-plate member is formed for directionally guiding relation to said tubular conduit, to determine a straight proximal direction of said tubular conduit for substantially the distal half of the longitudinal extent of said mask.
6. (Original) The mask construction of claim 5, in which said backing-plate member is further formed for tubular-conduit guidance on generally a helical arc to a location of gastric-discharge tube entry to said mask alongside said airway tube.
7. (Original) The mask construction of claim 1, further including an inflatable back cushion comprising a panel of softly compliant elastomeric material bonded peripherally to the pharyngeal-chamber side of said annulus and extending over said tubular conduit.
8. (Original) The mask construction of claim 7, in which said back-cushion panel is peripherally bonded to said tubular conduit.
9. (Original) The mask construction of claim 8, in which said back-cushion bond to said tubular conduit extends for substantially the distal half of the longitudinal extent of said inflatable ring.
10. (Original) The mask construction of claim 8, in which (a) a first arcuate circumferential fraction of said tubular conduit is connected to said backing-plate member, (b) the bond of said back cushion to said tubular conduit is angularly spaced from and generally opposite the connection of said tubular conduit to said backing-plate member, the bond to said back cushion being over a second arcuate circumferential fraction of said tubular conduit, (c) the arcuate circumferential extent by which said angular tubular-member connections are made to said backing-plate member and to said back cushion being reinforced with circumferentially arcuate stiffener formations.
11. (Original) The mask construction of claim 10, in which said stiffener formation are arcuate ribs in axially spaced array.

12. (Original) The mask construction of claim 11, in which said ribs project radially outward of said tubular conduit.

13. (Original) A laryngeal mask construction for concurrent airway service to a patient's laryngeal inlet and for removal of gastric-discharge products from the oesophagus, said construction comprising:

an inflatable/deflatable ring in the form of a generally elliptical annulus having an outer periphery configured for continuously sealed adaptation to the laryngeal inlet, said ring being a moulded product of relatively thin and softly pliant elastomeric material, said ring integrally including at its distal end a distally open tubular conduit through a distal opening in said ring, said distally open tubular conduit being for operative engagement and communication with the oesophageal inlet;

a backing-plate member of relatively stiff elastomeric material having a concave front side which is adapted to face the laryngeal inlet and which terminates in an elliptical footing in a geometric plane and in peripherally sealed engagement with the inner periphery of said inflatable/deflatable ring, said backing-plate member having an airway-tube connecting formation on a proximally directional axis that is at an acute angle with said geometric plane, said backing-plate member having a lumen for airway-tube communication with the laryngeal inlet, and said backing-plate member providing stability to the inner periphery of said annulus and proximally directed directional stability for said tubular conduit;

an airway tube connected to said connecting formation; and

a gastric-discharge tube connected to said tubular conduit.

14. (Previously Presented) A laryngeal mask construction, including:

(A) a generally elliptical inflatable ring defining a distal end, the ring being adapted for sealed engagement to a laryngeal inlet of a patient;

(B) a backing plate defining an air inlet, the backing plate being sealed to the ring, the backing plate establishing a laryngeal-chamber side and a pharyngeal-chamber side of the construction;

(C) an inflatable back cushion disposed on the pharyngeal-chamber side, the back cushion when inflated contacting a pharyngeal wall of the patient and biasing the ring away from the pharyngeal wall;

(D) a tubular conduit defining a distal end, the distal end of the tubular conduit being disposed near the distal end of the ring for communication with an esophageal inlet of the patient, a first portion of the conduit being adhered to a portion of the back cushion, a second portion of the conduit being adhered to a portion of the backing plate; and

(E) one or more stiffening ribs, the ribs being disposed on a third portion of the tubular conduit, the third portion of the tubular conduit being disposed between the first and second portions of the tubular conduit.

15. (Previously Presented) The laryngeal mask construction according to claim 14, further including an airway tube, a distal end of the airway tube being sealed to the air inlet.

16. (Previously Presented) The laryngeal mask construction according to claim 14, further including a gastric discharge tube, a distal end of the gastric discharge tube being sealed to a proximal end of the tubular conduit.

17. (Previously Presented) The laryngeal mask construction according to claim 14, wherein the ribs and the tubular conduit are of a monolithic construction.

18. (Previously Presented) The laryngeal mask construction according to claim 14, wherein the tubular conduit and the ring are of a monolithic construction.

19. (Previously Presented) The laryngeal mask construction according to claim 14, wherein the backing plate is domed.

20. (Previously Presented) The laryngeal mask construction according to claim 14, wherein the backing plate defines a groove.

21. (Previously Presented) The laryngeal mask construction according to claim 14, wherein the ring is of relatively thin and softly pliant elastomeric material.

22. (Previously Presented) The laryngeal mask construction according to claim 14, wherein the ring is a molded product.

23. (Previously Presented) A laryngeal mask construction, including:

(A) a generally elliptical inflatable ring defining a distal end, the ring being adapted for sealed engagement to a laryngeal inlet of a patient;

(B) a backing plate defining an air inlet, the backing plate being sealed to the ring, the backing plate establishing a laryngeal-chamber side and a pharyngeal-chamber side of the construction;

(C) an inflatable back cushion disposed on the pharyngeal-chamber side, the back cushion when inflated contacting a pharyngeal wall of the patient and biasing the ring away from the pharyngeal wall;

(D) a tubular conduit defining a distal end, the distal end of the tubular conduit being disposed near the distal end of the ring for communication with an esophageal inlet of the patient, a first portion of the conduit being adhered to a portion of the back cushion; and

(E) one or more stiffening ribs, the ribs being disposed on a second portion of the tubular conduit.

24. (Previously Presented) A laryngeal mask construction, including:

(A) a generally elliptical inflatable ring defining a distal end, the ring being adapted for sealed engagement to a laryngeal inlet of a patient;

(B) a backing plate defining an air inlet, the backing plate being sealed to the ring, the backing plate establishing a laryngeal-chamber side and a pharyngeal-chamber side of the construction;

(C) an inflatable back cushion disposed on the pharyngeal-chamber side, the back cushion when inflated contacting a pharyngeal wall of the patient and biasing the ring away from the pharyngeal wall;

(D) a tubular conduit defining a distal end, the distal end of the tubular conduit being disposed near the distal end of the ring for communication with an esophageal inlet of the patient, a first portion of the conduit being adhered to a portion of the backing plate; and

(E) one or more stiffening ribs, the ribs being disposed on a second portion of the tubular conduit.

25. (Previously Presented) A laryngeal mask construction, including:

(A) a generally elliptical inflatable ring defining a distal end, the ring being adapted for sealed engagement to a laryngeal inlet of a patient;

(B) a backing plate defining an air inlet, the backing plate being sealed to the ring, the backing plate establishing a laryngeal-chamber side and a pharyngeal-chamber side of the construction;

(C) an inflatable back cushion disposed on the pharyngeal-chamber side, the back cushion when inflated contacting a pharyngeal wall of the patient and biasing the ring away from the pharyngeal wall; and

(D) a tubular conduit defining a distal end, the distal end of the tubular conduit being disposed near the distal end of the ring for communication with an esophageal inlet of the patient, a first portion of the conduit being adhered to a portion of the back cushion, a second portion of the conduit being adhered to a portion of the backing plate, the first portion extending from a first location to a second location, the first location being near the distal end of the tubular conduit, the second location being spaced apart from the first location in a direction towards a center of the generally elliptical inflatable ring.

26. (Previously Presented) A laryngeal mask construction, including:

(A) an airway tube;

- (B) a gastric discharge tube;
- (C) a generally elliptical inflatable ring defining a distal end, the ring being adapted for sealed engagement to a laryngeal inlet of a patient;
- (D) a backing plate defining an air inlet, the air inlet being sealed to the airway tube, the backing plate being sealed to the ring, the backing plate establishing a laryngeal-chamber side and a pharyngeal-chamber side of the construction;
- (E) an inflatable back cushion disposed on the pharyngeal-chamber side, the back cushion when inflated contacting a pharyngeal wall of the patient and biasing the ring away from the pharyngeal wall;
- (F) a tubular conduit defining a proximal end and a distal end, the proximal end of the tubular conduit being sealed to the gastric-discharge tube, the distal end of the tubular conduit being disposed near the distal end of the ring for communication with an esophageal inlet of the patient, a first portion of the conduit being adhered to a portion of the back cushion, a second portion of the conduit being adhered to a portion of the backing plate; and
- (G) one or more stiffening ribs, the ribs being disposed on a third portion of the tubular conduit, the third portion of the tubular conduit being disposed between the first and second portions of the tubular conduit.

27. (Previously Presented) A laryngeal mask construction including:

- (A) a mask adapted for positioning inside of a patient near the patient's larynx, a central plane dividing the construction into a left portion and a right portion;
- (B) an airway tube coupled to the mask, at least a portion of the airway tube extending away from the mask and defining a central axis, the central axis of the portion of the airway tube being disposed on one side of the central plane; and
- (C) a gastric discharge tube coupled to the mask, at least a portion of the discharge tube extending away from the mask and defining a central axis, the central axis of the portion of the discharge tube being disposed on the other side of the central plane.

28. (Previously Presented) The laryngeal mask construction according to claim 27, wherein an outer diameter of the airway tube is substantially equal to an outer diameter of the discharge tube.

29. (Previously Presented) The laryngeal mask construction according to claim 27, wherein an outer diameter of the airway tube is not equal to an outer diameter of the discharge tube.

30. (Previously Presented) A device, including:

(A) an airway tube for supplying air to a patient;

(B) an evacuation tube for communication with an esophageal inlet of the patient;

(C) a mask adapted for sealed engagement with a laryngeal inlet of the patient, the mask including a back cushion for contacting a pharyngeal wall of the patient and biasing at least part of the mask away from the pharyngeal wall, the back cushion defining a periphery, a first portion of the back cushion being sealed to a first portion of the evacuation tube, the first portion of the back cushion being spaced apart from the periphery.

31. (Previously Presented) A device according to claim 30, the evacuation tube defining a proximal end and a distal end, the distal end being adapted for communication with the esophageal inlet of the patient, a segment of the evacuation tube extending from the distal end towards the proximal end being sealed to the back cushion.

32. (Previously Presented) A device according to claim 30, a second portion of the evacuation tube being sealed to the mask, the second portion being disposed opposite to the first portion.

33. (Previously Presented) A device according to claim 30, the mask including a generally elliptical inflatable ring.

34. (Previously Presented) A device according to claim 33, the mask further including a body, a second portion of the evacuation tube being sealed to the body.

35. (Previously Presented) A device according to claim 34, the body defining a slot, the evacuation tube extending along the slot.



36. (Previously Presented) A device including:

(A) an inflatable mask adapted for sealed engagement with a laryngeal inlet of the patient;

(B) a single airway tube for supplying air to a patient, the airway tube being coupled to the mask, a portion of the airway tube extending away from the mask;

(C) a single evacuation tube for communication with an esophageal inlet of the patient, the evacuation tube being coupled to the mask, a portion of the evacuation tube extending away from the mask, the portions of the airway and evacuation tubes being coupled to one another in side-by-side relation such that a center of one of the airway and evacuation tubes is disposed on a left side of the device and a center of the other one of the airway and evacuation tubes is disposed on a right side of the device.

37. (Previously Presented) A device according to claim 36, the evacuation tube including a conduit extending through a portion of the mask.

38. (Previously Presented) A device according to claim 37, further including an inflation line coupled to the mask for inflating and deflating the mask.

39. (Previously Presented) A device, including:

(A) an airway tube for supplying air to a patient;

(B) an evacuation tube extending from a proximal end to a distal end, the distal end being adapted for communication with an esophageal inlet of the patient;

(C) a mask adapted for sealed engagement with a laryngeal inlet of the patient, the mask including a back cushion for contacting a pharyngeal wall of the patient and biasing at least part of the mask away from the pharyngeal wall, a first portion of the evacuation tube being sealed to a portion of the back cushion, the first portion of the evacuation tube extending from near the distal end of the evacuation tube towards the proximal end of the evacuation tube.

40. (New) A device including:

(A) an inflatable mask, the mask being insertable, at least when deflated, through a mouth of the patient to an inserted location within a patient, the inserted location being near a laryngeal inlet of the patient;

(B) an airway tube coupled to the mask, the airway tube extending from a proximal end located outside of the patient's mouth through an interdental gap to the mask when the mask is at the inserted location, the interdental gap being a space between the patient's lower teeth and the patient's upper teeth;

(C) an evacuation tube for communication with an esophageal inlet of the patient, the evacuation tube being coupled to the mask, the evacuation tube extending from a proximal end located outside of the patient's mouth through the interdental gap to the mask when the mask is at the inserted location, one of the airway and evacuation tubes being greater than or equal to the other of the airway and evacuation tubes where the tubes pass through the interdental gap, the airway and evacuation tubes being coupled together in side-by-side relation such that the interdental gap need not be greater than the one tube when the mask is at the inserted location.

41. (New) A device according to claim 40, a diameter of the airway tube being equal to a diameter of the evacuation tube.

42. (New) A device according to claim 40, the mask including a generally elliptical inflatable ring.

43. (New) A device according to claim 42, the mask further including an inflatable back cushion, the back cushion contacting a pharyngeal wall of the patient and biasing at least part of the mask away from the pharyngeal wall when inflated and when the mask is at the inserted location.

44. (New) A device according to claim 42, the mask further including a body, a portion of the evacuation tube being sealed to the body.

45. (New) A device according to claim 44, the body defining a slot, the evacuation tube extending along the slot.

46. (New) A device including an airway tube, an evacuation tube, and an inflatable mask, the mask being insertable, at least when deflated, through a mouth of the patient to an inserted location within a patient, the inserted location being near a laryngeal inlet of the patient, the airway tube extending from a proximal end located outside of the patient's mouth through an interdental gap to the mask when the mask is at the inserted location, the interdental gap being a space between the patient's lower teeth and the patient's upper teeth, the evacuation tube being coupled to the mask, the evacuation tube extending from a proximal end located outside of the patient's mouth through the interdental gap to the mask when the mask is at the inserted location, one of the airway and evacuation tubes being greater than or equal to the other of the airway and evacuation tubes where the tubes pass through the interdental gap, the airway and evacuation tubes being coupled together in side-by-side relation such that the interdental gap need not be greater than the one tube when the mask is at the inserted location.